



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/563,243

01/03/2006

Saburo Yamada

050859

8671

23850 7590 02/25/2008  
KRATZ, QUINTOS & HANSON, LLP  
1420 K Street, N.W.  
Suite 400  
WASHINGTON, DC 20005

EXAMINER

OLSON, LARS A

ART UNIT

PAPER NUMBER

3617

MAIL DATE

DELIVERY MODE

02/25/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/563,243	<b>Applicant(s)</b> YAMADA, SABURO	
	<b>Examiner</b> Lars A. Olson	<b>Art Unit</b> 3617	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>01032006, 03222006</u> .                                      | 6) <input type="checkbox"/> Other: ____.                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 7, 8 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohara et al. (US 5,069,141).

Ohara et al. discloses the same transport system as claimed, as shown in Figures 1-11, that is comprised of a main rail, as shown in Figure 2, having at least one slope region, as shown in Figures 5 and 6, an auxiliary rail, as shown in Figure 2, that is formed under said main rail, a vehicle, defined as Part #19, that is coupled by a coupling means to a transported object, as shown in Figure 1, said vehicle having a drive wheel, defined as Part #28, that is rotatable on an upper surface of said main rail, and a drive means for said drive wheel in the form of an electric motor, defined as Part #31, an auxiliary wheel, defined as Part #79, that is rotatable on said auxiliary rail without contacting said main rail, and an elastic-force loading means, defined as Part #81, that is configured to apply an elastic force in a direction that presses said auxiliary wheel against said auxiliary rail, as shown in Figures 5 and 6.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohara et al.

Ohara et al., as set forth above, discloses all of the features claimed except for the use of an auxiliary rail having a portion with decreasing thickness.

The use of a rail having a specific thickness or range of thicknesses would be considered by one of ordinary skill in the art to be a design choice based upon a desired distance between wheels of a vehicle that is traveling upon said rail, or a desired height from which said vehicle is suspended from said rail.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to utilize a rail having a portion with decreasing thickness in combination with the transport system as disclosed by Ohara et al. for the purpose of providing a transport system with a rail that varies in thickness in order to vary the distance between wheels that are traveling on said rail.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohara et al. in view of Junji (JP8-127337 A).

Ohara et al., as set forth above, discloses all of the features claimed except for the use of a system with a rail having a slope region with first and second sprockets, an endless belt, an engaging means, and an auxiliary drive means.

Junji discloses an assist device for a vehicle to ascend a sloped portion of a rail, as shown in Figures 1-3, said device being comprised of a first sprocket, defined as Part #42, that is disposed at a high position of a sloped portion of a rail, defined as Part #25, a second sprocket, defined as Part #41, that is disposed at a low position of said sloped portion, an endless belt, defined as Part #43, that is looped between said first and second sprockets, an engaging means, defined as Part #45, that is formed on said endless belt, and an auxiliary drive means, defined as Part #44, that is configured to drive said first sprocket in order to move a vehicle, defined as Part #12, that is engaged by said engaging means from said low position to said high position, as shown in Figures 2 and 3.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to utilize an assist device for a vehicle to ascend a sloped portion of a rail, as taught by Junji, in combination with the transport system as disclosed by Ohara et al. for the purpose of providing a rail vehicle with a powered means for ascending a sloped portion of a rail in order to facilitate upward travel by said vehicle on said rail.

6. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohara et al. in view of Ewing, Jr. (US 3,064,585).

Ohara et al., as set forth above, discloses all of the features as claimed except for the use of a vehicle with a pair of driven wheels that are rotatable on opposite surfaces of a web of an H-shaped rail.

Ewing, Jr. discloses a transport system, as shown in Figures 1-12, that includes a vehicle, defined as Part #4, that is suspended from an H-shaped rail, defined as Part #1, with an upper flange, defined as Part #16, a web, defined as Part #17, and a lower flange, defined as Part #18, where said vehicle has a pair of driven wheels, defined as Part #22, that are rotatable on opposite surfaces of said web, as shown in Figure 4.

The examiner takes official notice that the use of shock absorbing material in combination with a wheeled vehicle and a rail is well known in the art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to utilize driven wheels that are rotatable on opposite sides of a web of a rail, as taught by Ewing, Jr., in combination with the transport system as disclosed by Ohara et al. for the purpose of providing additional support for a vehicle traveling along a rail.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Slocum (US 6,446,560), DiRosa (US 5,231,933 and US 5,222,439), Hedstrom (US 4,602,567), Boland (US 4,274,335), Horn (US 3,987,734), Saint-Miklosy, Jr. (US 3,937,147), Kaufmann (US 3,935,822), Goodell

Art Unit: 3617

(US 3,626,856) and Lorenz et al. (US 3,625,158) disclose transport systems that include a vehicle that is suspended from a rail.

8. Any inquiry concerning this communication from the examiner should be directed to Exr. Lars Olson whose telephone number is (571) 272-6685.

lo

February 6, 2008

/Lars A Olson/

Primary Examiner, Art Unit 3617